

### Abstract of the Disclosure

An apparatus may include a sort circuit for receiving first and second baseband signals, where the sort circuit shifting frequencies of the first and second baseband signals. The apparatus may also include a removal circuit for receiving the shifted first and second baseband signals and for combining the shifted first and second baseband signals to provide a frequency-modulated signal, and a symbol timing restoration circuit for measuring a timing error in related symbols of the frequency-modulated signal, for generating an address selection signal that is proportional to the timing error, in response to a carrier restoration signal, and for indicating restoration of the carrier.